

II. IN THE SPECIFICATION

Please replace the paragraph on page 5 at lines 7 through 19 of the application with the following paragraph.

The adaptive filter 22 generates a reduced rank or projected received signal vector $\tilde{r}(i)$ of dimension $D \times 1$ by multiplying the Hermitian transpose of the matrix M by the received sample vector $r(i)$ as follows[[.]]

$$\tilde{r}(i) = M^{\dagger} r(i).$$

AX The adaptive filter 22 generates the approximate desired signal $\hat{b}(i)$ by multiplying the Hermitian transpose of the filter coefficient vector by the reduced rank vector as follows[[.]]

$$\hat{b}(i) = \tilde{c}^{\dagger} \tilde{r}(i).$$

The approximate desired signal $\hat{b}(i)$ is applied to a conventional slicer 23 that essentially rounds the approximate desired signal $\hat{b}(i)$ to a desired signal level $b(i)$ which may be used to generate the filter coefficients in a decision directed training mode.
